

# Fact Sheet



## For Draft/Proposed Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-04900052-2013**

Application Received: **April 23, 2012**

Plant Identification Number: **049-00052**

Permittee: **Equitrans, L. P.**

Facility Name: **Curtisville #50 Compressor Station**

Mailing Address: **100 Allegheny Center Mall, Pittsburgh, PA 15212-5331**

*Revised: N/A*

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Physical Location:	Mannington District, Marion County, West Virginia
UTM Coordinates:	549.65 km Easting • 4377.15 km Northing • Zone 17
Directions:	Interstate 79 North to the Downtown Fairmont Exit (Number 137). Bear to the right on off ramp and merge into left lane prior to stop light. Make left at stop light and stay on Route 310 for 3 stop lights. Make right turn onto bridge at 3rd light. Go up the hill at stop light after crossing bridge. Go thru 2nd stop light. Make a left at next stop light. Bear to the right hand lane for two stop lights and make a right onto Route 250 North. Stay on Route 250N to Mannington. In Mannington after passing Rite Aid (on right), make left hand turn onto Market street. At the Y at the end of Market Street, bear right onto Buffalo Road and continue on this road past Mannington Fairgrounds into the community of Logansport. After leaving Logansport make a left hand turn onto a new two lane bridge (1st left after Logansport) to Owen-Davey Creek Road. The first right turn leads to the station.

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### Facility Description

The Curtisville Compressor Station #50 is a natural gas transmission facility covered by NAICS 48210 and SIC 4922. The station has the potential to operate seven (7) days per week, twenty-four (24) hours per day. The station consists of one (1) 1100-hp natural gas internal combustion reciprocating engine, one (1) 70-hp electric generator, one (1) 125-hp electric generator, one (1) heating boiler, one (1) TEG dehydrator, one (1) dehydrator boiler, one (1) dehydrator flare, and four (4) tanks of various sizes. The Curtisville #50 Compressor Station is used to compress storage gas.

## Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2010 Actual Emissions
Carbon Monoxide (CO)	40.76	5.1
Nitrogen Oxides (NO <sub>x</sub> )	142.16	39.2
Particulate Matter (PM <sub>10</sub> )	2.11	0.5
Total Particulate Matter (TSP)	2.11	0.5
Sulfur Dioxide (SO <sub>2</sub> )	0.03	<0.1
Volatile Organic Compounds (VOC)	5.62	1.5

*PM<sub>10</sub> is a component of TSP.*

Hazardous Air Pollutants	Potential Emissions	2010 Actual Emissions
Benzene	0.10	0.0
Ethylbenzene	0.08	0.0
Toluene	0.08	0.0
Xylenes	0.11	0.0
n-Hexane	0.05	0.0
Formaldehyde	2.34	0.7
Total HAPs	3.72	0.7

*Some of the above HAPs may be counted as PM or VOCs.*

## Title V Program Applicability Basis

This facility has the potential to emit 142.16 TPY of NO<sub>x</sub>. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, Equitrans, L. P. is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

## Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR2	To Prevent and Control Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers
	45CSR6	Open burning prohibited
	45CSR10	SO <sub>x</sub> emissions.
	45CSR11	Standby plans for emergency episodes
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting
	45CSR30	Operating permit requirement
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 63, Subpart ZZZZ	RICE MACT
	40 C.F.R. Part 64	Compliance Assurance Monitoring
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
State Only:	45CSR4	No objectionable odors
	45 CSR17	To Prevent and Control Particulate Air Pollution from Materials Handling, Preparation, Storage and Other Sources of Fugitive Particulate Matter

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

## Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit ( <i>if any</i> )
N/A	N/A	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B," which may be downloaded from DAQ's website.

## Determinations and Justifications

### RICE MACT Requirements

With this permit renewal, it has been determined that the engines at this facility are subject to 40 C.F.R. 63, Subpart ZZZZ: National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

The two Kohler engines (G-100 and G-002) are non-emergency spark-ignition four-stroke rich burn engines rated at 70 and 125 HP. They fall into the Existing Stationary Engine under 500 HP Located at Area Sources of HAP category. The compliance date for these requirements is October 19, 2013. The following applicable requirements were added to this permit:

- The requirements in 40 C.F.R § 63.6603(a) and Table 2d to 40 C.F.R. 63, Subpart ZZZZ. (Added as Condition 4.1.1)
- The monitoring, installation, collection, operation, and maintenance requirements of 40 C.F.R. §§ 63.6625(e) and (h). (Added as Conditions 4.1.4 and 4.1.5).
- An oil analysis program according to the requirements of 40 C.F.R. § 63.6625(j). (Added as condition 4.1.7).
- The continuous compliance requirements of 40 C.F.R. §§ 63.6605 and 63.6640(a) and Table 6 of 40 C.F.R. Part 63, Subpart ZZZZ. (Added as Condition 4.1.3).
- The recordkeeping requirements of 40 C.F.R. § 63.6655, except §§ 63.6655(c) and (f). (Added as Condition 4.4.1).
- The reporting requirements of 40 C.F.R. §§63.6640(b) and (e). (Added as condition 4.5.5).

The Clark compressor engine (C-001) is a non-emergency spark-ignition four-stroke rich burn engine rated at 1100 HP. This engine falls into the Existing Stationary Engine over 500 HP Located at Area Sources of HAP category. The compliance date for these requirements is October 19, 2013. The following applicable requirements were added to this permit:

- The requirements in 40 C.F.R § 63.6603(a) and Table 2d to 40 C.F.R. 63, Subpart ZZZZ. (Added as Condition 4.1.1)
- The operating limitations in 40 C.F.R § 63.6603(a) and Table 1b to 40 C.F.R. 63, Subpart ZZZZ. (Added as Condition 4.1.2)
- The performance testing requirements in 40 C.F.R §§ 63.6612, 63.6615, and 63.6620 and Tables 3-5 to 40 C.F.R. 63, Subpart ZZZZ. (Added as Conditions 4.3.1, 4.3.3, and 4.3.4)
- The monitoring, installation, collection, operation, and maintenance requirements of 40 C.F.R. § 63.6625(h). (Added as Condition 4.1.5) Equitrans, L.P. is not installing CEMS, so 40 C.F.R. §§ 63.6625(a) and (b) requirements were not added.
- The initial compliance requirements in 40 C.F.R § 63.6630 and Table 5 to 40 C.F.R. 63, Subpart ZZZZ. (Added as Conditions 4.3.1, 4.3.2, and 4.5.2)
- The continuous compliance requirements of 40 C.F.R §§ 63.6605, 63.6635, and 63.6640(a) and Table 6 of 40 C.F.R. 63, Subpart ZZZZ. (Added as condition 4.1.3)
- The notification requirements of 40 C.F.R § 63.6645. (Added as condition 4.5.4)
- The recordkeeping requirements of 40 C.F.R. § 63.6655, except §§ 63.6655(c), (e), and (f). (Added as condition 4.4.1)
- The reporting requirements of 40 C.F.R § 63.6650, except § 63.6650(g). (Added as condition 4.5.3)
- The reporting requirements of 40 C.F.R. §§63.6640(b) and (e). (Added as condition 4.5.5).

### **Streamlining of Visible Emissions Requirements**

45CSR§§6-4.3 and 4.4 limits the emissions of smoke from the flare to 20% opacity during normal operating conditions and 40% during start-up. These requirements were included as conditions 5.1.5 and 5.1.6 of R30-04900052-2007. With this permit renewal, these requirements are combined with condition 5.1.2.b, which previously allowed visible emissions for only 5 minutes during any given two hour period. The new language in condition 5.1.2.b sets the opacity limits from 45CSR§§6-4.3 and 4.4 during the 5-minute period where visible emissions are allowed.

### **SO<sub>2</sub> and H<sub>2</sub>S Emission Limits**

The following limits from 45CSR10 were added with this permit renewal:

- As specified in 45CSR§10-4.1, this facility cannot emit in-stack sulfur dioxide concentrations exceeding 2,000 parts per million by volume (Condition 5.1.5).
- As specified in 45CSR§10-5.1., this facility cannot combust gas containing hydrogen sulfide in a concentration greater than 50 grains per 100 cubic feet of gas except in the case of a person operating in compliance with an emission control and mitigation plan approved by the Director and USEPA (Condition 5.1.6).

### **Area Source of HAPs**

Several permit conditions were added to ensure compliance with the facility's claimed area source status. The new conditions are as follows:

- Condition 5.1.11 requires the necessary monitoring, testing, and recordkeeping to justify the area source status.
- Condition 5.2.5 was added to demonstrate compliance with the area source status, claimed within conditions 5.1.1 and 5.1.11. Using GRI-GLYCalc V3 or higher, the dehydration system will be accurately defined by monitoring and recording actual operating parameters associated with the dehydration system.
- According to condition 5.3.4, Equitrans, L.P. shall determine the contents of the wet natural gas stream by sampling in accordance with GPA method 2166 and analyzing according to extended GPA Method 2286 analysis as specified in the GRI-GLYCalc V4 Technical Reference User Manual and Handbook. This will be done within the third year of this permit term, prior to submitting the permit renewal application. Condition 5.5.6 requires submission of an emission summary.
- Condition 5.4.6. requires records of all monitoring data, wet gas sampling, and annual GLYCalc emission estimates. This condition replaces conditions 5.4.6 and 5.4.7 from R30-04900052-2007.

The following sections of the previous Title V permit were deleted because they related to the benzene exemption for 40 CFR 63, Subpart HHH which does not apply because the facility is an area source: 5.1.1(b), 5.1.10, and 5.4.8.

### **Revision to PM<sub>10</sub> Monitoring Requirements**

Conditions 5.2.3 and 5.2.4 are monitoring requirements to ensure compliance with PM emission limits. These conditions were revised to clarify that the PM limit these conditions refer to is the 45CSR§6-4.1 hourly PM<sub>10</sub> emission limit from condition 5.1.4.

### **Gas Chromatography Analysis**

To determine compliance with the sulfur and H<sub>2</sub>S limits of conditions 5.1.5 and 5.1.6, the permittee shall perform gas chromatography analyses at least once per year, as required in conditions 5.2.13 and 5.2.14.

### **Compliance Assurance Monitoring (CAM)**

The only control device at this facility is the Dehydration Flare (Dehy Flare). CAM was addressed in the previous renewal, and the CAM plan is summarized in section 5.7. However, there have been several additions with this permit renewal to clarify the CAM permit language.

The following general CAM requirements were added:

- Commencement of Operations requirements as specified in 40 CFR §§ 64.7(a) and 64.6(d) (added as Condition 5.2.6).
- Proper Maintenance requirements as specified in 40 CFR § 64.7(b) (added as Condition 5.2.7).
- Continued Operation requirements as specified in 40 CFR § 64.7(c) (added as Condition 5.2.8).
- Documentation of Need for Improved Monitoring as specified in 40 CFR § 64.7(e) (added as Condition 5.2.9).
- QIP requirements as specified in 40 CFR § 64.8 (added as Condition 5.2.10).
- Identification of Excursions as specified in 40 CFR § 64.6(c)(2) (added as Condition 5.2.11).
- Response to Excursions or Exceedances as specified in 40 CFR § 64.7(d) (added as Condition 5.2.12).

Language was added to Condition 5.2.1 to ensure compliance with the CAM plan. These additions are as follows:

- All manufacturers' recommendations regarding periodic testing/checks for the proper installation and operation of the flare-monitoring will be followed.
- The flare-monitoring device shall be calibrated, maintained, and operated in accordance with manufacturer's specifications.

This additional language is referenced in the CAM Plan Summary (Section 5.7).

**Greenhouse Gas Tailoring Rule:** This is a renewal Title V Permit and there have been no changes that would have triggered a PSD permit. As such, there are no applicable GHG permitting requirements.

### Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

45CSR10	Since the heating boiler and the dehydrator boiler are less than 10 MMBtu/hr, they are exempt from sulfur dioxide standards of 45CSR§§10-3, 6 through 8. The Curtisville facility does not refine or process gas streams, therefore, it is not subject to 45CSR§10-5. Also, since the Curtisville facility is not a manufacturing process, it is not subject to 45CSR§10-4.
45CSR21	Regulation to Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds. Curtisville #50 station is not located in Cabell, Kanawha, Putnam, Wayne, or Wood counties that are affected by 45CSR21.
45CSR27	To Prevent and Control the Emissions of Toxic Air Pollutants. Natural gas is included as a petroleum product and contains less than 5% benzene by weight. 45CSR§27-2.4 exempts equipment used in the production and distribution of petroleum products providing that such equipment does not produce or contact materials containing more than 5% benzene by weight.
40 C.F.R. 60 Subpart GG	Standards of Performance for Stationary Gas Turbines. There are no turbines at the Curtisville #50 Compressor Station.
40 C.F.R. 60 Subpart K	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978. All tanks are below 40,000 gallons in capacity.
40 C.F.R. 60 Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984. All tanks are below 40,000 gallons in capacity.
40 C.F.R. 60 Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984. All tanks storing volatile organic liquids are below 75 m <sup>3</sup> in capacity.
40 C.F.R. 60 Subpart KKK	Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plants. Curtisville #50 Compressor Station is not engaged in the extraction of natural gas from field gas or in the fractionation of mixed natural gas liquids to natural gas products.
40 C.F.R. 60 Subpart LLL	Standards of Performance for Onshore Natural Gas Processing: SO <sub>2</sub> Emissions. There are no sweetening units at the Curtisville #50 Compressor Station.
40 C.F.R. 60 Subpart KKKK	Standards of Performance for Stationary Combustion Turbines. There are no turbines at the Curtisville #50 Compressor Station.
40 CFR 63 Subpart HH	National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities. Curtisville #50 Compressor Station is not subject to Subpart HH since this station is not a natural gas production facility.
40 CFR 63 Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters. This facility is not a major source of HAPs, therefore this subpart does not apply according to 40 C.F.R. §63.7485.

### Request for Variances or Alternatives

None.

### Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

### **Comment Period**

Beginning Date: December 7, 2012  
Ending Date: January 7, 2013

All written comments should be addressed to the following individual and office:

Rex Compston, P.E.  
Title V Permit Writer  
West Virginia Department of Environmental Protection  
Division of Air Quality  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304

### **Procedure for Requesting Public Hearing**

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

### **Point of Contact**

Rex Compston, P.E.  
West Virginia Department of Environmental Protection  
Division of Air Quality  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304  
Phone: 304/926-0499 ext. 1209 • Fax: 304/926-0478

### **Response to Comments (Statement of Basis)**

Not applicable.